

# DOCUMENT RESUME

ED 136 800

IR 004 591

TITLE Educational Television.  
INSTITUTION Federal Communications Commission, Washington, D.C.  
PUB DATE Aug 76  
NOTE 29p.; Information Bulletin No. 12. For related document, see ED 063 786

EDRS PRICE MF-\$0.83 HC-\$2.06 Plus Postage.  
DESCRIPTORS Administrative Agencies; Broadcast Industry; \*Cable Television; Certification; Communication Satellites; \*Educational Television; \*Federal Legislation; Government Role; Programing (Broadcast)

## ABSTRACT

Aspects of educational television (ETV) covered in this report include its history, growth and development, noncommercial television broadcast stations, instructional television fixed service (ITFS), microwave relay system, television signal translators, cable systems, and the use of satellites. The report also outlines the Federal Communications Commission's (FCC) rules and regulations pertaining to ETV, sources of governmental and private funding, application procedures, construction permit, program testing, networks and sources of programing, along with a list of application forms, organizations and government agencies with an interest in ETV. (SC)

\*\*\*\*\*  
\* Documents acquired by ERIC include many informal unpublished \*  
\* materials not available from other sources. ERIC makes every effort \*  
\* to obtain the best copy available. Nevertheless, items of marginal \*  
\* reproducibility are often encountered and this affects the quality \*  
\* of the microfiche and hardcopy reproductions ERIC makes available \*  
\* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
\* responsible for the quality of the original document. Reproductions \*  
\* supplied by EDRS are the best that can be made from the original. \*  
\*\*\*\*\*

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

EDUCATIONAL TELEVISION

Federal Communications Commission, Washington, D.C.

ED136800

IR004591



## EDUCATIONAL TELEVISION

12

8/76

ED136800

IR004591

INFORMATION BULLETIN

The term "Educational Television" in this bulletin reflects its use in the FCC Rules and Regulations (Subpart E, Sec. 73.621, Noncommercial educational television stations) and includes all television stations licensed for noncommercial operation, whether the programming is cultural, instructional, public affairs or otherwise.

GENERAL

The term "public television" came into usage with passage of the Public Broadcasting Act of 1967. Most noncommercial television stations use "public" to describe themselves. In this bulletin the term P/ETV is sometimes used to designate "public/educational television."

Virtually the entire country, including Puerto Rico, Guam, and the Virgin Islands, is served by noncommercial television.

Noncommercial television is an integral part of both formal and informal quality education. It brings into the home cultural events, public affairs presentations, and a variety of other programs previously available only to those who had the means and the opportunities to seek them out in areas where they were available.

About one-fifth of noncommercial television time is devoted to programs for the classroom, where it presents instructors, demonstrations, and visual and aural materials that greatly increase the value of students' learning experiences.

The first noncommercial educational television station went on the air in May, 1953. By June, 1976 the number of educational stations had grown to 160 UHF and 100 VHF outlets. Seven UHF and six VHF construction permits were outstanding.

## EDUCATIONAL TELEVISION - 2

In addition, by May, 1976, 169 Instructional Television Fixed Service (ITFS) systems with approximately 450 channels had begun operation since that service was established by the Federal Communications Commission in 1963, and construction permits were held by 13 additional ITFS systems (described on pages 6 and 7).

### HISTORY

Noncommercial educational broadcasting dates back to the beginning of broadcasting as a public communications service. Educational institutions were among the pioneers in experimental radios which led to the establishment of regular AM broadcasting following World War I.

In 1941 the FCC allocated five channels for noncommercial FM broadcasting and in 1945 increased the number to 20. By May, 1976, there were 856 educational FM stations and 30 noncommercial AM stations on the air, with 60 FM construction permits outstanding.

In 1949 the FCC invited comments on the advisability of providing channels for noncommercial educational television and on March 22, 1951, as part of a general review of television, the Commission proposed establishing reserved educational TV channels.

On April 14, 1952, after extensive proceedings, the Commission opened UHF channels for expanding TV needs and at the same time reserved 242 channel assignments (80 UHF and 162 VHF) for noncommercial educational use. These reservations constituted about 12 percent of the total allocations at that time. The FCC said:

"We conclude that the record shows the desire and ability of education to make a substantial contribution to the use of television. There is much evidence in the record concerning the activities of educational organizations in AM and FM broadcasting. It is true and was to be expected that education has not utilized these media to the full extent that commercial broadcasters have, in terms of number of stations and number of hours of operation. However, it has also been shown that many of the educational institutions which are engaged in aural broadcasting are doing an outstanding job in the presentation of high quality programming, and have been getting excellent public response."

## EDUCATIONAL TELEVISION - 3

"And most important in this connection, it is agreed that the potential of television for education is much greater and more readily apparent than that of aural broadcasting, and that the interest of the educational community in the field is much greater than it was in aural broadcasting..."

"The public interest will clearly be served if these stations are used to contribute significantly to the educational process of the nation. The type of programs which have been broadcast by educational organizations, and those which the record indicated can and would be televised by educators, will provide a valuable complement to commercial programming."

The first ETV station to go on the air was KUHT, University of Houston, Texas, on May 12, 1953.

### GROWTH AND DEVELOPMENT

The table of channel allocations, including noncommercial educational reservations, has been revised several times since it was first issued. A major revision, issued in June, 1965, and corrected in March, 1966, provided for 107 VHF and 508 UHF ETV reservations, an increase of more than two-thirds over the previous total, providing for 20 percent of total reservations.

This allocations plan was designed to permit future selection and assignment of unallocated channels to places where at that time noncommercial TV was not anticipated. As of June, 1976, 130 VHF and 537 UHF allocations were reserved for educational television. Nine of the P/ETV stations on the air, however, were operating on nonreserved channels.

The steady growth of ETV is illustrated in the following table of stations on the air at the end of each calendar year:

## EDUCATIONAL TELEVISION - 4

<u>Year</u>	<u>Number</u>	<u>Year</u>	<u>Number</u>
1953	1	1965	113
1954	10	1966	125
1955	17	1967	151
1956	21	1968	179
1957	27	1969	187
1958	35	1970	200
1959	44	1971	212
1960	51	1972	232
1961	62	1973	240
1962	75	1974	248
1963	84	1975	258
1964	100	June 1976	260

Seventy-eight percent of the American population, 162 million Americans, lives within range of a noncommercial television signal. A study in 1975 showed 49.2 percent monthly and 31.4 percent weekly viewing of public television by the nation's households.

The Commission also licenses translators and boosters for relaying P/ETV broadcast signals and has jurisdiction over microwaving such signals.

On July 25, 1963, the FCC established the Instructional Television Fixed Service for the transmission of instructional and cultural materials to schools and other selected receiving locations, following an experiment in the 2000 megacycle (1990-2110) band in the Plainedge, Long Island, N. Y., school district. The Plainview-Old Bethpage Schools system was the first on the air, on March 2, 1964, in the 2500-2690 MHz ITFS band.

In early 1967, after almost two years of study of the technical, organizational, financial, and programing considerations of noncommercial television, the Carnegie Commission on Educational Television published a report, Public Television: A Program for Action. Its recommendations for P/ETV's future support and development were the bases for the initiation of the Public Broadcasting Act of 1967.

Title I of the Act extended the matching grant concept of the Educational Television Facilities Act of 1962 and included educational radio in the grants for the first time. In subsequent extensions of the Public Broadcasting Act of 1967, Congress provided for a Federal share of facilities costs as high as 75 percent and for liberal use of funds for interconnection.

## EDUCATIONAL TELEVISION - 5

Title II of the Act authorized establishment of a Corporation for Public Broadcasting (CPB), to function as a nonprofit enterprise, rather than as a U. S. Government agency. The mission of the CPB is to foster the development of public broadcasting by supporting the production of program materials for noncommercial television and radio stations, station operation, interconnection of stations, and research and training in educational broadcasting, and to serve film and tape library and clearinghouse functions. A major CPB effort was the establishment of the Public Broadcasting Service (PBS) to manage the national distribution of TV programs.

Through the 1974-1975 fiscal year, CPB and the Educational Broadcasting Facilities received annual appropriations for their matching grant program operated by the U. S. Office of Education. In 1975 Congress passed a long-range, five-year funding bill.

### NONCOMMERCIAL TV BROADCAST STATIONS

Of the 260 stations on the air in June, 1976, about 10 percent were licensed to local public school systems, 30 percent to colleges and universities, 25 percent to community organizations and 35 percent to states and municipal authorities.

At first, virtually all of the ETV stations were VHF. Since 1960, however, most of the construction permit (CP) grants and applications have been in the UHF part of the spectrum, and, in late 1967, the number of UHF stations on the air for the first time exceeded the number of VHF. (All-channel receiver legislation passed by Congress required that all TV sets sold after April 30, 1964, be capable of receiving UHF as well as VHF signals.)

With the number of VHF unused reservations continually diminishing, the continued growth of UHF ETV stations seems likely. Technological advances have resulted in markedly improved UHF television receivers, diminishing the disparity between VHF and UHF reception, although much remains to be done.

P/ETV station programming ranges from in-school instructional materials to performing arts for the home viewing audience. Materials are obtained from many sources, including individual stations private producing organizations, and instructional television libraries.

## EDUCATIONAL TELEVISION - 6

Local in-school programs, sometimes locally produced, may be entire series, individual lessons, or part of a lesson such as a demonstration. Supporting material such as civic tours, visits to cultural sites, and interviews with prominent persons are frequent.

Cultural and public programming is broad in scope and includes programs of a probing and controversial nature, interviews with persons in all areas of life, presentations of the performing and plastic arts, and programs for special groups or on special subjects. Noncommercial educational stations are prohibited by Section 399 of the Communications Act from editorializing and from supporting or opposing any candidate for public office.

Noncommercial programming purposes vary. Some practitioners believe that P/ETV should reach the largest general audience with general interest programs not usually available on commercial television. Others believe P/ETV should reach a large spectrum of viewing groups with special, including minority, interest programs.

### INSTRUCTIONAL TELEVISION FIXED SERVICE

Instructional Television Fixed Service (ITFS) was established by the FCC in 1963 to provide multiple frequencies in the 2500-2690 MHz band for in-school educational television use. It was regularized by the FCC in 1971 with 28 channels.

It is not a broadcast service intended for reception by the general public. A single ITFS system can provide up to four simultaneous channels for in-school service, plus audio systems to permit two-way communications. ITFS is serving about 8,000 schools with about 5 million pupils. In several areas it is being used for distributing materials for continuing education and educational data exchange, and improving communication among governmental entities.

It has two-way communication capabilities, providing instantaneous feedback from students to instructors.

ITFS includes both voice and data response stations. Systems in several states transmit informational programs from university campuses to surrounding industrial installations and medical centers as well as from industry and medical centers back to students on campus.



## EDUCATIONAL TELEVISION - 7

ITFS transmitting equipment operates with very low power, with a useful service range of about 20 miles and is relatively lower in cost than television broadcast equipment. Although the 2500 MHz signal is transmitted openly, the cost of special receiving antenna and converters removes the system, for practical purposes, from home use. Special receiving devices convert the signals to regular TV channels so that programs may be seen on conventional TV receivers.

Because ITFS differs technically from standard VHF and UHF broadcasting, it operates under separate rules and regulations. Requirements for eligibility to be a licensee of an ITFS station are the same as those for a noncommercial educational television station. Transmitter engineers must be technically qualified but routine operations may be performed by third-class radio-telephone permit holders, remote control and unattended operation of some equipment are provided for and permission to utilize the signal must be obtained by the potential user from the transmitting licensee.

A booklet, "ITFS: What It Is . . . How to Plan" was developed by the FCC's Committee for the ITFS, and was published in 1967 by the National Education Association. It can be ordered from the N. E. A., 1201 16th Street, N. W., Washington, D. C. 20005. Rules governing ITFS are contained in Part 74, Subpart I, "Instructional Television Fixed Service," of the FCC Rules and Regulations.

## MICROWAVE

Microwave relay systems utilize narrow, concentrated beams for efficient short range transmission. P/ETV stations may use microwave equipment to provide program circuits between studio and transmitter (TV-STL), to relay programs between TV broadcast stations (TV Intercity Relay), and to pick up programs outside regular studios (TV Pickup). The rules governing such TV auxiliaries are contained in Part 74, Subpart F of the FCC Rules, "Television Auxiliary Broadcast Stations."

TV program relay facilities for closed-circuit TV systems may be authorized on certain microwave channels in the Business Radio Service under Part 91, Section 91.554, of the Rules. Such stations also may be used in connection with ITFS systems. ITFS stations as well as studio-transmitter program circuits may be used for relaying programs between ITFS systems in adjacent areas, for delivering ITFS programs to TV broadcast stations, and for relaying TV broadcast programs to ITFS systems.

## EDUCATIONAL TELEVISION - 8

### TRANSLATORS

Translators are used to provide coverage in weak signal areas of a station's signal zone and to extend TV service where the signal does not reach. They are called translators because in picking up and re-transmitting the TV signal, they change or "translate" the signal, strengthening it and re-transmitting it on a different channel.

Many school districts and educational stations construct and operate translators for both school and community programming. TV translators may not operate as independent broadcast stations.

### CABLE

Cable television systems pick up television broadcast signals, including those of noncommercial television stations, and distribute them by cable to subscribing members of the public and frequently to public buildings including schools.

Cable systems operate in areas where, because of terrain or obstructions from buildings, television reception is poor or the number of signals available is limited. Cable also is expanding to areas of good over-the-air reception to provide many channels than otherwise would be available for public and instructive services.

Under the Commission's rules a cable system is required, on request, to carry the signals of all P/ETV stations and translators within whose grade B contour service area the system operates. With the approval of the State ETV authorities, P/ETV signals also may be carried into other areas.

Cable systems also may distribute educational and instructional programs within the community on channels not used for broadcast signals. FCC Cable TV rules require that every cable system of more than 3,500 subscribers dedicate at least one channel for educational and instructional purposes, one for government use, and one for public access purposes, if channel capacity permits.

These channels are to be available without charge from the time subscriber service is inaugurated until five years after the channel is made available.

## EDUCATIONAL TELEVISION - 9

### SATELLITES

Although by mid-1976, noncommercial television had only experimented with satellite transmission, it already had planned to use satellites on a regular basis within the next decade. In January 1976, the Corporation for Public Broadcasting committed up to \$110 million over the subsequent 10-year period for a satellite distribution system.

In 1975 a number of public broadcasting, telecommunications, and educational organizations formed the Public Service Satellite Consortium to plan for, encourage and implement satellite use. In early 1976 the Public Broadcasting Service and CPB presented a proposal to the FCC to develop a network of ground terminals to receive signals from satellites already operated by The Western Union Telegraph Company.

Funded by PBS stations and CPB and with long-term loan financing, the proposal anticipated multi-channel public broadcasting satellite transmissions within two years.

The most comprehensive experiment in satellite communications up to 1976 was the use of the ATS-6 in 1974 and 1975 for health, education and other public service applications in Appalachia, the Rocky Mountain states and Alaska. A 1974 joint U. S. - Canada Communications Technology Satellite project was developed to provide similar services on a more extensive basis.

In early 1975 the FCC issued a Notice of Inquiry and in early 1976 a Second Notice of Inquiry on preparation of United States proposals for the World Administrative Radio Conference (WARC) of the International Telecommunications Union (ITU) scheduled for January 1, 1977, to plan the use of the 11.7-12.2 GHz frequency band for a Broadcasting-Satellite Service.

Principal U. S. recommendations were expected to relate to the sharing of the frequencies with other services to which the bands are allocated, including the Fixed Service, the Mobile Service, the Broadcasting Service and the Fixed-Satellite (Space-to-Earth) Service.

A number of organizations interested in educational, medical, and other social programming advocated satellite reception by and distribution from surface complexes located at universities, schools, hospitals, and similar community centers. A principal concern was whether this ground station approach was most advisable or whether there should be direct satellite-to-home broadcasting.

## EDUCATIONAL TELEVISION - 10

### FINANCING

Financial support for P/ETV stations comes primarily from State and local government sources, from contributions from business, and from viewer subscriptions. Foundations, principally the Ford Foundation over the years have contributed substantial sums to P/ETV.

P/ETV stations operated by colleges, universities, and school systems obtain about 75 percent of their income from direct budgeted support. Stations operated by State agencies receive about 80 percent of their funds from state and local appropriations. Community stations, on the other hand, receive about 60 percent of their support from gifts, grants, and services -- the services provided primarily for the production of in-school programs. ITFS systems are supported by the local institutional licensee.

Some funding comes from Congress. The Public Broadcast Financing Act of 1975 provided, for the first time, long-term funding for public broadcasting. The Act authorized funding for the Corporation for Public Broadcasting for five years, with amounts ranging from \$88 million for fiscal year 1977 to \$160 million in fiscal year 1981.

The Act contains a matching grant formula of \$1 for every \$2.50 in non-Federal contributions raised by public broadcasting. For fiscal 1977 \$30 million for facilities and 1 million for experimental demonstration was authorized for the educational broadcasting facilities program. In fiscal 1975 the U. S. Office of Education provided \$10.8 million in matching grants for educational television facilities, \$7.5 million for programing under the Emergency School Aid Act, and \$7 million for programing under the Special Projects Act of the Elementary and Secondary Education Amendments of 1974. These amounts are relatively small when compared with the ETV stations non-Federal income of about \$230 million in fiscal 1975.

Funds for P/ETV are included in the Elementary and Secondary Education Act of 1965, especially Title I, for assistance to educationally deprived children; Title II, which provides printed and audio-visual materials; Title III, supplementary educational centers and services.

## EDUCATIONAL TELEVISION - 11

The Higher Education Act of 1965, especially Title VI, provides for acquisition of closed-circuit instructional television equipment, materials and minor remodelling of TV facilities. Funds also may be available for student training from the Vocational Education Act of 1963 as amended; the Appalachian Regional Development Act of 1965, especially Title I, Special Appalachian Programs; the Economic Opportunity Act of 1964, particularly Title I, Youth Programs, and Title II, urban and rural community action programs; and from the Public Health Service for research, demonstrations and programing, particularly from the National Institutes of Health, the National Institute of Mental Health, and the Division of Nursing of the Bureau of Health Manpower.

### RULES

Rules and Regulations pertaining to noncommercial educational television may be found in various sections of Subpart E. The basic information on applications and authorizations, however, is contained in Sec. 73.621, as follows:

#### 73.621 Noncommercial educational stations

In addition to the other provisions of this subpart, the following shall be applicable to noncommercial educational television broadcast stations:

(a) Except as provided in paragraph (b) of this section, noncommercial educational broadcast stations will be licensed only to nonprofit educational organizations upon a showing that the proposed stations will be used primarily to serve the educational needs of the community; for the advancement of educational programs; and to furnish a nonprofit and noncommercial television broadcast service.

(1) In determining the eligibility of publicly supported educational organizations, the accreditation of their respective state departments of education shall be taken into consideration.

(2) In determining the eligibility of privately controlled educational organizations, the accreditation of state departments of education or recognized regional and national educational accrediting organizations shall be taken into consideration.

## EDUCATIONAL TELEVISION - 11A

(b) Where a municipality or other political subdivision has no independently constituted educational organization such as, for example a board of education having autonomy with respect to carrying out the municipality's educational program, such municipality shall be eligible for a noncommercial educational television broadcast station. In such circumstances, a full and detailed showing must be made that a grant of the application will be consistent with the intent and purpose of the Commission's rules and regulations relating to such stations.

(c) Noncommercial educational television broadcast stations may transmit educational, cultural and entertainment programs, and programs designed for use by schools and school systems in connection with regular school courses, as well as routine and administrative material pertaining thereto.

(d) A noncommercial educational television station may broadcast programs produced by or at the expense of, or furnished by persons other than the licensee, if no other consideration than the furnishing of the program and the costs incidental to its production and broadcast are received by the licensee. The payment of line charges by another station, network, or someone other than the licensee of a noncommercial educational television station, or general contributions to the operating costs of a station, shall not be considered as being prohibited by this paragraph.

## EDUCATIONAL TELEVISION - 11B

(e) Each station shall furnish a nonprofit and noncommercial broadcast service. However, noncommercial educational television stations shall be subject to the provisions of Section 73.654 to the extent that they are applicable to the broadcast of programs produced by, or at the expense of, or furnished by others, except that no announcements (visual or aural) promoting the sale of a product or service shall be broadcast in connection with any program: Provided, however, That where a sponsor's name or product appears on the visual image during the course of a simultaneous or rebroadcast program either on the backdrop or in similar form, the portions of the program showing such information need not be deleted.

Note 1: Announcements of the producing or furnishing of programs, or the provision of funds for their production, may be no more than twice, at the opening and at the close of any program, except that where a program lasts longer than 1 hour an announcement may be made at hourly intervals during the program if the last such announcement occurs at least 15 minutes before the announcement at the close of the program. The person or organization furnishing or producing the program or providing funds for its production, shall be identified by name only, except that in the case of a commercial company having bona fide operating divisions or subsidiaries one of which has furnished the program or funds, the division or subsidiary may be mentioned in addition to or instead of the commercial company. No material beyond the company (or division or subsidiary) name shall be included. Upon request for waiver of this provision, the Commission may authorize the inclusion of brief additional descriptive material only when deemed necessary to avoid confusion with another company having the same or a similar name. No mention shall be made of any product or service with which a commercial enterprise being identified has a connection except to the extent the name of the product or service is the same as that of the enterprise (or division or subsidiary) and is so included. A repeat broadcast of a particular program is considered a separate program for the purpose of this note.



## EDUCATIONAL TELEVISION - 11C

Note 2: Announcements may be made of general contributions of a substantial nature which make possible the broadcast of programs for part, or all, of the day's schedule. Such announcements may be made at the opening and closing of the day or segment, including all of those persons or organizations whose substantial contributions are making possible the broadcast day or segment. In addition, one such general contributor may be identified once during each hour of the day or segment. The provisions of Note 1 of this section as to permissible contents apply to announcements under this note.

Note 3: The limitations on credit announcements imposed by Notes 1 and 2 of this section shall not apply to program material, the production of which was completed before January 1, 1971, or to other announcements broadcast before January 1, 1971, pursuant to underwriting agreements entered into before November 30, 1970.

Note 4: The provision of Notes 1 and 2 of this section shall not apply during the broadcast times in which "auctions" are held to finance station operation. Credit announcements during "auction" broadcasts may identify particular products or services, but shall not include promotion of such products or services beyond that necessary for the specific auction purpose. Visual exposure may be given to a display in the auction area including the underwriter's name and trademark, and product or service or a representation thereof.

Note 5: The numerical limitations on permissible announcements contained in Notes 1 and 2 of this section do not apply to announcements on behalf of noncommercial, nonprofit entities, such as the Corporation for Public Broadcasting, State or regional entities, or charitable foundations.

Volume III of the FCC Rules and Regulations, which includes Part 73, Radio Broadcast Services, may be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402. The price is \$15.75.



## EDUCATIONAL TELEVISION - 12

### APPLICATION PROCEDURES

The Commission's Table of TV Assignments, Section 73.606 of the Rules and Regulations, contains the educational reservation status and frequencies of TV broadcast channels allocated to a given city. An educational organization or institution may apply for a reserved or nonreserved channel.

If there is no allocated channel in a given community, a qualified group may petition for reservation of an unused assigned channel, for the "drop-in" assignment of a channel or for the reallocation of an unoccupied channel from another city. The petition must clearly delineate the purpose of the proposal and show why it would be in the public interest. If the Commission determines that the proposal warrants consideration, it will institute a rulemaking proceeding, and if the assignment is subsequently made, an application may then be made to activate the channel.

Many prospective applicants obtain legal and engineering counsel to assist in supplying required and accurate information to the Commission. Expeditious processing frequently is dependent upon the good order of the application and complete, specific and precise information.

Applicants for new broadcast stations or for major changes in existing facilities must give public notice of the filing as specified in Section 1.580 of the rules and Regulations. All broadcast applications must be submitted in triplicate to the Secretary, Federal Communications Commission, Washington, D. C. 20554.

After they are tendered, if complete and in conformity with the rules, they are formally accepted for filing and assigned a file number. An application is not acted upon until at least 30 days following public notice of its acceptance. During this period it may be subject to objecting petitions. The application requires information on the applicant's legal qualifications and ownership, engineering, finances, proposed programming and equal employment opportunity.

### PROCESSING

Processing of applications involves three major areas of examination and review: engineering, financial, and legal.

## EDUCATIONAL TELEVISION - 13

The engineering examination verifies the coordinates and calculations to determine if they conform to FCC technical requirements. The Antenna Survey Branch determines whether the proposed antenna structure meets Federal Aviation Administration regulations.

The financial examination checks the financial qualifications, including adequacy of resources and matters such as discrepancies between estimated and potential actual operating costs, and total costs balanced against particular costs. The financial examination is particularly concerned with verification of the source of funds, whether the applicant has the necessary funds, available or committed, to construct and operate the station for one year or has been given the authority to use the money, bonds, securities or other finances described in the application.

The legal examination determines whether the applicant is qualified under the Communications Act to become a licensee. Attorneys review technical and economic findings, check the corporate structure, determine if there are any matters before the FCC that might affect the applicant, and analyze the Statement of Program Service.

### CONSTRUCTION PERMIT

When an application for a new station or for changes in an existing facility is approved, a Construction Permit (CP) is issued. The permittee has 18 months in which to complete the project. If the station cannot be constructed in the specified time, an extension may be applied for. Following issuance of the CP the permittee may request call letters, with the first available preference assigned.

Within 30 days from the time the CP is issued the permittee must submit an Ownership Report. Subsequently, this report also must be filed every three years (most stations file with each license renewal), and within 30 days of a change of officer or ownership of the station.

When construction of the facility is complete, in accordance with the CP, the permittee may, following notification to the Commission, conduct equipment tests. Application for the license may be submitted, accompanied by measurements of equipment performance.

## EDUCATIONAL TELEVISION - 14

### PTA

At the same time -- but at least 10 days before regular programming is scheduled to begin -- Program Test Authority (PTA) may be requested. PTA is contingent upon approval by the FCC of performance data as detailed in the license application. In effect, PTA entitles the permittee to begin regular station operation and programming, although the license itself is not granted until the license application receives final approval.

### RENEWAL

Periodic license renewal is necessary. Renewal dates vary by geographic region. A first renewal must be filed at the first date specified for the licensee's State; thereafter, licenses normally are for three years.

The renewal application contains information on the licensee's legal qualifications, engineering, finances, programming, and equal employment opportunity (EEO) policy and practice. In addition a licensee must file an annual employment report (Form 395) showing its total employees and number of women and specified minorities grouped into several job categories to assist the FCC in determining whether it complies with the Commission's EEO rules.

Those wishing more information on the renewal process or wishing to make a complaint on any aspect of a station's operation are referred to The Public and Broadcasting, a procedural manual that can be obtained from the Public Information Office, Federal Communications Commission, Washington, D. C. 20554.

### ASCERTAINMENT

In 1976 the FCC issued a Report and Order requiring noncommercial TV stations to conduct a formal ascertainment survey of community problems in connection with their programming, similar to that required of commercial broadcasters, with filings beginning April 1, 1977 (August for renewals). The ascertainment must be conducted throughout the license term by renewal applicants or within six months of filing an application for transfer, assignment or construction permit. (Less formal procedures for radio applicants require only a narrative statement of methods, content, and results of the community ascertainment; 10 watt stations are exempt.)

## EDUCATIONAL TELEVISION - 15

The educational television applicant must place in its public file, available for public inspection, a statement of the demographic composition of its community of license, including a breakdown by sex, race and age. In determining community problems, it must interview leaders representative of the different groups in the community and conduct a random survey of members of the general public. P/ETV renewal applicants may substitute public meetings or call-in programs for the random survey.

The public file must include information concerning these interviews and surveys and an annual list of 10 problems ascertained and programs broadcast (by renewal applicants) or proposed (by other than renewal applicants) to meet the problems. A P/ETV station that presents only instructional programming is exempt from formal ascertainment requirements.

### ITFS

ITFS channels are selected on a case-by-case basis. There is no pre-planned assignment table in the rules, although community pre-planning is desirable.

The Commission welcomes comments from local ITFS Committees on applications received by the FCC. Licensing procedures for ITFS systems are similar to those for noncommercial television stations, except that when the ITFS system is ready to begin operation, the permittee is free to do so after notification to the FCC.

### FORMS

Noncommercial educational television applications, requests, and reports are submitted on the following forms:

- |               |  |
|---------------|--|
| FCC Form 313: | Application for Authorization in the Auxiliary Broadcast Services.   |
| FCC Form 314: | Application for Consent to Assignment of Broadcast Station Construction Permit or License.   |
| FCC Form 315: | Application for Consent to Transfer of Control of Corporation Holding Radio Broadcast Station Construction Permit or License.  |
| FCC Form 316: | Application for consent to Assignment of Radio Broadcast Station Construction Permit or License or Transfer of Control of Corporation Holding Radio Broadcast Station Construction Permit or License (Short Form). |

## EDUCATIONAL TELEVISION - 15A

FCC Form 318:	Request for Subsidiary Communications Authorizations.
FCC Form 321:	Application for Construction Permit to Replace Expired Permit.
FCC Form 323E:	Ownership Report for Noncommercial Educational TV, FM, or Standard Broadcast Station.
FCC Form 330L:	Application for Instructional Television Fixed Station License.
FCC Form 330P:	Application for Authority to Construct or Make Changes in an Instructional Television Fixed Station.
FCC Form 330R:	Application for Renewal of an ITFS License.
FCC Form 340:	Application for Authority to Construct or Make Changes in a Noncommercial Educational TV, FM, or Standard Broadcast Station.
FCC Form 341:	Application for Noncommercial Educational TV, FM, or Standard Broadcast Station.
FCC Form 342:	Application for Renewal of Noncommercial Educational TV, FM, or Standard Broadcast Station License.
FCC Form 345:	Consent to Assignment of Broadcast Translator Station Construction Permit or License.
FCC Form 346:	Application for Authority to Construct or Make Changes in the TV or FM Broadcast Translator Station.
FCC Form 347:	Application for TV or FM Broadcast Translator Station License.
FCC Form 348:	Application for Renewal of TV or FM Broadcast Translator Station License.
FCC Form 701:	Application for Additional Time to Construct Radio Station.

## EDUCATIONAL TELEVISION - 16

### NETWORKS AND PROGRAMS

The Public Broadcasting Service (PBS), 475 L'Enfant Plaza West, S.W., Washington, D.C. 20024, is the member organization of the nation's public television stations. Although it is not a television network in the usual sense, PBS manages and schedules the interconnection system which in early 1976 was providing about 70 hours of programming weekly to 251 PTV stations.

Program distribution from PBS is through AT&T long lines, microwaves, and its videotape library. PBS administers the Station Program Cooperative, a system through which stations select and collectively purchase many of the individual programs on their schedules. PBS also provides support services, including representation in Washington, research, promotion, legal and engineering counsel to the stations.

PBS policies are established by a 25-member Lay Board of Governors elected by the member stations, which in turn is advised by a 25-member Board of Managers representing station personnel. PBS is funded through annual member service fees from the stations, with its technical distribution facilities financed by the Corporation for Public Broadcasting.

The production of programs is primarily the responsibility of individual public television stations within the system, about one-third of which is contributed to the national program schedule in 1975. Other programs are obtained from independent producers and from a variety of international sources.

In 1975 the National Public Affairs Center for Television merged with station WETA-TV in Washington, D.C. and became a production division of WETA. Located at 995 L'Enfant Plaza North, S.W., Washington, D.C. 20024, this production division concentrates on national events originating in Washington, usually for distribution over the PBS facilities. It offers special program coverage of such major news happenings as Presidential speeches and press conferences, Presidential primaries and conventions and Congressional hearings.

In 1970 National Educational Television, once the principal source of national ETV programming, merged with television station WNET, New York City, and became its production arm. It provides programming related to special news events in New York and produces cultural and artistic programs for PBS distribution. The WNET Production Division is located at 10 Columbus Circle, New York, N.Y. 10023.

## EDUCATIONAL TELEVISION - 17

Eastern Educational Television Network, 31 Elliot Street, Newton Upper Falls, Massachusetts 02164, provides live interconnection and tape distribution services to 40 stations in 12 States. Evening programing via tape distribution is available to ETV stations outside of the eastern region via subscription to the Program Service Membership. The EEN provides approximately 20 hours of instructional television and 10 hours of evening programing per week to its interconnected members.

Southern Educational Communications Association (SECA) 928 Woodrow Street, Columbia, South Carolina 29250, provides programing and production assistance to TV and radio stations, educational institutions, and industry; grant application, copyright clearance, and utilization assistance; engineering consultation, and a library of aural and visual materials for its members in the southeastern States. It also produces and distributes original programing.

Western Educational Network, c/o KWSU-TV, Murrow Communications Center, University of Washington, Pullman, Washington, 99163, is a voluntary organization of ETV stations in the States of Alaska, California, Hawaii, Nevada, Oregon, and Washington, organized for the purpose of producing and exchanging original programing.

Central Educational Network, 5400 N. Saint Louis Avenue, Chicago, Illinois 60625, is a voluntary organization of ETV stations in 12 States in the central midwest that provides both instructional and general audience programing for its members via tape distribution and interconnection.

Midwestern Educational Television, Inc., 1640 Como Avenue, St. Paul, Minnesota 55108, consists of 17 ETV stations in Minnesota, North Dakota, South Dakota, and Wisconsin that are interconnected via microwave for program distribution.

The Rocky Mountain Corporation for Public Broadcasting, 1603 Sigma Chi Road, N.W., Albuquerque, New Mexico 87106, serves seven States from the Mexican to Canadian borders through its operating division, the Rocky Mountain Public Broadcasting Network, and the Rocky Mountain regional distribution center.



## EDUCATIONAL TELEVISION - 18

### INSTRUCTIONAL TV SOURCES

The two major sources of programs for instructional television are:

Agency for Instructional Television (AIT), Indiana University, Bloomington, Indiana 47405. Composed of members from the United States and Canada, it develops joint projects involving agencies from States and Provinces and acquires, adapts, and distributes television, audiovisual, and print materials for use as learning resources. AIT was established in 1973 through reorganization of the National Instructional Television Center, which had been in operation since 1962.

National Great Plains Instructional Television Library (GPITL), P. O. Box 80669, Lincoln, Nebraska 68501, serves as a distribution center of instructional TV courses for all academic levels and content areas, and in all forms, including tapes, cassettes, and films. In 1971 GPITL acquired the assets of the Midwest Program for Airborne Television (MPATI), which had ceased operations in 1968.

Almost every State is in the planning or active stage of an interconnected network and many States are developing multi-media networks that include a variety of television delivery services, such as broadcasting, cable, ITFS, closed-circuit, microwave and satellite.

A number of groups, such as the Association of Media Producers and the National Audio-Visual Association, represent commercial producers and distributors of programs and equipment applicable to educational television needs.

### ORGANIZATIONS

Almost all of the organizations listed above under NETWORKS AND PROGRAMS provide additional services such as conferences, workshops, information distribution, legal and engineering assistance. A regional group not listed above that provides such services is the Western Educational Society for Telecommunications (WEST), P. O. Box 5346, Tacoma, Washington 98405. Other national organizations include:



## EDUCATIONAL TELEVISION - 19

Corporation for Public Broadcasting (CPB), 1111 Sixteenth Street, N.W., Washington, D.C. 20036, is a private nonprofit corporation that receives and dispenses private and public funds, pursuant to Title II of the Public Broadcasting Act of 1967, to support the production, acquisition, and distribution of high quality radio and television programs and otherwise assist noncommercial broadcasting stations. Under specific criteria established by CPB, Community Service Grants are available to educational television stations upon application. The corporation for Public Broadcasting also provides funds to the Public Broadcasting Service for station interconnection activities, including support for the Station Program Cooperative. CPB is governed by a 15 member board appointed by the President and confirmed by the Senate.

National Association of Educational Broadcasters (NAEB), 1346 Connecticut Avenue, N.W., Washington, D.C. 20036, founded in 1924, is a professional society of individuals and their institutions involved with the use of electronic communications media for educational and social purposes. Its services include convention and conference programs, a bi-monthly professional journal, a personnel placement service, research and development activities, the Educational Broadcasting Institute program of seminars and workshops, list of special publications, a biweekly newsletter, and consulting services.

Association for Educational Communications and Technology (AECT), 1201 Sixteenth Street, N.W., Washington, D.C. 20005, holds conferences, conducts research projects, publishes reports and provides consultation on educational media, including television, for its member schools and teachers.

Joint Council on Educational Telecommunications (JCET), 1126 Sixteenth Street, N.W., Washington, D.C. 20005, is comprised of national and regional educational and communications organizations and acts as a channel of communication among educational interests, broadcasting, cable and satellite interests and federal offices and Congress on issues affecting educational telecommunications.

## EDUCATIONAL TELEVISION - 20

National Education Association (NEA), 1201 Sixteenth Street, N. W., Washington, D. C. 20005, furnishes consultative services in educational telecommunications to schools and organizations throughout the country through its Telecommunications Office. It has issued publications on ITFS, CCTV, cable, satellite, and other telecommunications services, and provides coordination for Public-Cable Inc., a consortium of national organizations concerned with representing the public interest in cable development.

Educational Media Council (EMC), 1346 Connecticut Avenue, N. W., Washington, D. C. 20036, is composed of representatives of national educational and business organizations and conducts research and develops project plans for effective use of specialized interests and skills in educational communications.

Broadcast Education Association (BEA), 1771 N. Street, N. W., Washington, D. C. 20036, is an organization of broadcast educators, principally on the college and university level, who prepare students for entry into broadcasting.

The development of satellite use for public broadcasting has led to the establishment of organizations such as the Public Service Satellite Consortium, which is composed of broadcasters, health services, State Telecommunications Commissions, and national and regional educational associations, for planning, encouraging, and implementing satellite use, and is located at San Diego, California 92182; and the Public Interest Satellite Association, for exploration of ways to meet the needs of nonprofit organizations, including public broadcasting, in telephony, telex, radio, data transmission, and other narrow band uses, located at 55 West 42nd Street, New York, N. Y. 10036.

The increasing use of cable by educators led to the establishment of Public-Cable, Inc., a consortium of national organizations and individuals, with services including information on State and municipal actions, the legislative and regulatory fields, background papers on national cable issues, and an annual cable conference; it is located at Kutztown State College, Kutztown, Pennsylvania 19530.

## EDUCATIONAL TELEVISION - 21

Other groups on the national level such as the International Radio and Television Society, the Speech Communications Association, the American Theatre Association, American Association of School Administrators, American Federation of Teachers, Catholic Education Association, American Council on Education, American Library Association and a number of organizations on the regional and State levels are involved to greater or lesser degrees in educational television activities.

---

### GOVERNMENT AGENCIES

Educational Broadcasting Branch, Federal Communications Commission, Washington, D. C. 20554, studies educational broadcasting services; develops policy recommendations on educational communications matters; serves as liaison between the FCC and other public and private groups, including educational stations, institutions, organizations, and individuals, other government agencies and industry; provides consultation and coordination on educational communications to the public and to various Commission offices; and serves as a clearinghouse of information.

Office of Telecommunications Policy in the Department of Health, Education, and Welfare, 330 Independence Avenue, S. W., Washington, D. C. 20201, is responsible for overall departmental coordination of communications technology functions and for planning and evaluating use of developing technologies for application to departmental programs.

The Office of Libraries and Learning Resources of the U. S. Office of Education includes an Educational Technology Division. The Division's two branches are:

1. The Educational Broadcasting Facilities Program Branch, which provides matching grants for facilities. Forms and guidelines for applying for such grants may be obtained directly from that Branch, c/o the Division and Office, 400 Maryland Avenue, S. W., Washington, D. C. 20202.
2. The Educational Television Development Branch, which is concerned with innovative programing. Information about the latter program may be obtained from the same address. Additional information on these and other U. S. Office of Education programs may be found under FINANCING.

## EDUCATIONAL TELEVISION - 22

National Institute of Education, 1200 19th Street, N. W., Washington, D. C. 20202, is the research and development arm of the Department of Health, Education, and Welfare. The Technological Applications Division has the responsibility for the development and demonstration of technology use in education, including television.

---

The National Foundation on the Arts and the Humanities, 1800 G Street, N. W., Washington, D. C. 20006, is composed of two groups:

1. The National Council on the Arts, which administers grants for projects relating to the presentation, performance, execution, and enhancement of public understanding of major art forms, including television, radio, motion pictures, and videotape and sound recordings;

2. The National Council on the Humanities, is the policy-making body for the Endowment of the Humanities. It develops and encourages the humanities, including television and radio, through research and grants.

The General Services Administration, 18th and F Streets, N. W., Washington, D. C. 20405, administers the Federal Property Act, which authorizes donations of surplus property, equipment, and land. These may be applied for by certain nonprofit educational institutions and organizations such as educational television and radio stations.

The Federal Interagency Committee on Education, Office of the Assistant Secretary for HEW, Washington, D. C. 20202, consists of subcommittees dealing with significant areas of education, coordinating the efforts of a number of different federal agencies, and includes a Subcommittee on Educational Technology.

The National Audiovisual Center (NAC), General Services Administration, Washington, D. C. 20409, serves as a central bibliographic source and as a point of distribution for program materials available from a number of federal agencies.

Many other federal agencies offer grants, program materials and/or production contracts to noncommercial television stations. Most States have established educational telecommunications or broadcasting offices or commissions, principally to coordinate activities for the development of State networks. Instructional television offices are found in many Departments of Education/ Departments of Public Instruction.

## EDUCATIONAL TELEVISION - 23

Many county and local school systems and even individual schools have educational television coordinators for the purpose of achieving effective utilization of closed-circuit, instructional fixed, cable, broadcast, and other forms of television dissemination such as microwave, common carrier and multipoint distribution.

Many colleges and universities, public and private, have persons responsible for ETV development and use. State and local ETV councils and citizens organizations are sometimes quasi-official in that many of their members and directors are public officials.